

## UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.		FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/757,287	7	01/14/2004	Stephen Oser	35015US1	4506	
116	7590	07/19/2006		EXAMINER		
PEARNE & GORDON LLP 1801 EAST 9TH STREET				CASTELLANG	CASTELLANO, STEPHEN J	
SUITE 1200			ART UNIT	PAPER NUMBER		
CLEVE	CLEVELAND, OH 44114-3108			3727		
				DATE MAILED: 07/19/2006		

Please find below and/or attached an Office communication concerning this application or proceeding.

Note that parts 105A and 105C are not identical but are similar and resemble mirror image parts.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 4, 5, 10 and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Darby et al. ('411) (Darby).

Darby discloses an end closure assembly for a pressure vessel, comprising a head member (domed shaped element 39, tubular connector 55 and seal 57 made of elastomeric non-metallic material), a retainer ring (79 which can be made of fiber composite) and a securing plate (face plate 41). The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 4, 5 and 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Darby.

Darby discloses the invention except for all of the parts of the head member being non-metal. Official notice is taken that domed heads and tubular connectors of non-metal composite plastic material are well known. It would have been obvious to use non metal plastic components where corrosion and weight are of concern.

Art Unit: 3727

Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Darby in view of Galasso et al. (Galasso).

Galasso discloses the invention except for the elliptical head member. Galasso teaches an elliptical (insofar as elliptical is shown) head member (160) in contact with an universal head member (140) and a securing plate (110). It would have been obvious to add an elliptical head member to take up the space between an universal head member and a securing plate to provide a tight fit and to properly support the parts within the assembly so that these parts do not deform in the presence of excessive force or pressure.

Claims 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Darby in view of Andersson.

Darby discloses the invention except for the retainer ring comprising two elements.

Andersson teaches a retainer ring 7, 8 comprised of support ring 8 and blocks 7, the block elements are believed to be identical. It would have been obvious to substitute the retaining ring structure of Andersson for Darby's expansion ring to compensate for thermal expansion of the ring assembly for application in hot or cold weather or for storing hot or cold fluid.

In the event that the blocks are not deemed identical, it would have been obvious to make the blocks identical and mirror images of each other as a matter of design choice in making similar uniform parts allowing easier manufacture and inventory and the ability to swap identical parts.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen J. Castellano whose telephone number is 571-272-4535. The examiner can normally be reached on increased flexibility plan (IFP).

Application/Control Number: 10/757,287

Art Unit: 3727

Page 4

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <a href="http://pair-direct.uspto.gov">http://pair-direct.uspto.gov</a>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Stephen J. Castellano Primary Examiner Art Unit 3727

sjc